

ICO Global, opposes a "rigid reciprocity approach"^{54/} but states that "[i]n determining whether to allow a foreign satellite to have access to the U.S., it is appropriate to examine the [foreign] markets that the foreign satellite serves. . . ."^{55/}

D. The Global ECO-Sat Test Does Not Discriminate Against ICO Global

ICO Global maintains that the proposed global ECO-Sat test for MSS discriminates against it, in favor of U.S.-licensed Big LEO MSS systems.^{56/} While equal standards should apply to all Big LEO MSS systems to the extent the systems are similarly-situated, ICO Global is not a U.S.-licensed system and ICO Global has extensive national government ownership that the U.S.-licensed Big LEOs do not have. Accordingly, the ECO-Sat test does not discriminate against ICO Global.

It is appropriate for the Commission to apply a different earth station licensing regime to ICO Global -- as a non-U.S.-licensed satellite system -- than it would apply to a U.S.-licensed satellite system. Because non-U.S.-licensed systems are not subject to the detailed application and licensing requirements for U.S. space system licenses^{57/} or to the conditions in such licenses, the Commission has far less control over the activities of a non-U.S.-licensed satellite system than over the activities of a U.S.-licensed satellite system. The Commission made this point in the Foreign Carrier Entry Order, in contrasting its "ability to address competitive concerns with

^{54/} Hughes Comments at 8. The Hughes Comments are filed on behalf of Hughes companies other than Hughes Telecommunications and Space, but the comments state that the interests of Hughes include the investment of Hughes Telecommunications and Space in ICO Global. Id. at 4.

^{55/} Id. at 12 ("In addition to examining the openness of the foreign satellite's home market, the Commission should analyze each of the route markets . . . that the foreign-licensed satellite proposes to serve from the U.S.-licensed earth station.").

^{56/} ICO Global Comments at 28-32.

^{57/} Compare 47 C.F.R. § 25.114 (space system license application requirements) with 47 C.F.R. § 25.130 (earth station license application requirements).

traditional safeguards" where a U.S. company invests in a foreign carrier, with the absence of "effective means to guard against anticompetitive conduct made possible by a foreign carrier's control over [a] foreign bottleneck when the foreign carrier invests in a U.S. carrier."^{58/}

ICO Global is not barred from seeking treatment as a U.S.-licensed satellite system by applying for a space system license from the Commission. It is somewhat disingenuous for ICO Global to complain of discrimination, when it has chosen to seek a space system license under the relaxed licensing regime of the United Kingdom and to register as a corporation under the permissive corporate laws of the Cayman Islands.^{59/}

Furthermore, ICO Global has far greater influence with national telecommunications regulators around the world than do Iridium, Globalstar, or Odyssey. Nearly all of the investors in ICO Global are national telecommunications regulators and/or government-owned service providers.^{60/} The U.S. General Accounting Office ("GAO") stated in a recent report:

^{58/} Foreign Carrier Entry Order, 11 FCC Rcd at 3913.

^{59/} See Amendment to the Application of COMSAT Corporation, FCC File No. 106-SAT-MISC-95 (July 11, 1995) (attaching documents reincorporating ICO Global in the Cayman Islands).

^{60/} The investors in ICO Global, with the exception of Hughes Electronics Corp., the builder of I-CO Global's satellites, are the Signatories of Inmarsat. See ICO Annual Report 1995; U.S. General Accounting Office, Competitive Impact of Restructuring the International Satellite Organizations at 11 n.14 (July 1996) (Report to the Chairman, Committee on Commerce, House of Representatives) ("GAO Report") (Hughes is only external investor in ICO Global as of mid-June 1996). 73 of the 78 Signatories of Inmarsat are national telecommunications regulators and/or government-owned service providers. See Inmarsat Member States, Signatories, Investment Shares and Council Membership, Inmarsat Doc. ASSEMBLY/11/1/ADD/1, Revised Annex IV (Jan. 23, 1996). The only Inmarsat Signatories that do not have any government ownership are those from Canada, Chile, New Zealand, the United Kingdom (where the government does hold a "golden share" permitting it to veto action of the Inmarsat Signatory, British Telecom), and the United States.

Inmarsat and those signatories that chose to invest directly in ICO hold a majority interest and thus have a significant vested interest in the organization's financial success because they share in ICO's profits. . . . Inmarsat's signatories are typically the government authorities or dominant telecommunications providers that control or influence access to their domestic telecommunications markets.^{61/}

Furthermore, the charts that are appended to ICO Global's comments on the "spheres of influence" of the Big LEO MSS systems obscure ICO Global's influence in two important respects.^{62/} First, these charts ignore the influence of ICO Global in the numerous home countries of Inmarsat Signatories that have an indirect ownership interest in ICO Global through Inmarsat.^{63/} By contrast, ICO Global's 1995 annual report identifies these indirect investors through Inmarsat in a color chart.^{64/} Second, the "spheres of influence" of the U.S.-licensed Big LEOs that ICO Global identifies are generally based on agreements with non-governmental investors or service providers in the countries in question. These relationships produce far less "influence" than those with the governmental entities who comprise the majority of ICO Global ownership.

^{61/} GAO Report at 11.

^{62/} See ICO Global Comments at Exhibit A.

^{63/} Inmarsat has guaranteed voting rights of 15 percent in ICO Global, and owns 1.5 million Ordinary Shares and 700,000 B Shares (which are convertible into Ordinary Shares), totaling 15.7% of initial ICO Global shares. See ICO Global Comments at 43 n.66; Application of COMSAT Corporation at 17-18, Application of COMSAT Corporation for Authority to Participate in the Procurement of Facilities of the I-ICO Global Communications Limited System, FCC File No. 106-SAT-MISC-95 (May 1, 1995). For example, the indirect ownership interest, through Inmarsat, of British Telecom in ICO Global amounts to \$14 million, or roughly one percent of the company.

^{64/} ICO Annual Report 1995 at 16.

E. The Relaxed Market Entry Tests For The Intergovernmental Satellite Organizations Proposed By COMSAT And Intelsat Would Extend The IGOs' Monopoly Privileges

Numerous commenters in DISCO-II identify significant competitive risks posed by the intergovernmental privileges and market power of the intergovernmental satellite organizations ("IGOs") -- Intelsat and Inmarsat.^{65/} Not surprisingly, COMSAT and Intelsat disagree. They seek a market entry test for the IGOs based upon the Commission's proposed alternative of "a much less structured standard that focuses directly on the competitive consequences of an IGO providing domestic service within the United States."^{66/} Moreover, COMSAT argues that this same "effect on competition" test should apply to affiliates, subsidiaries, and successors of the IGOs, and that the Commission's authorization of IGO services should automatically transfer to these affiliates, subsidiaries, and successors.^{67/} These proposals, taken together, would significantly extend the monopoly privileges and market power that the IGOs currently enjoy.

The Commission itself recognizes that the "effect on competition" test "might not provide sufficient guidance to interested parties."^{68/} This problem is highlighted by COMSAT's comments, which demonstrate the potential for failure of the "effect on competition" test to address the global market power of the IGOs. COMSAT

^{65/} See Motorola and Iridium Comments at 40-44; TRW Comments at 18-26 (advocating an elevated standard for market entry by IGOs); Loral Comments at 26-28; AT&T Comments at 14-17; Comments of Lockheed Martin Corporation at 13-14; GE Comments at 10-12; ORBCOMM Comments at 2-8; Comments of American Mobile Satellite Corporation ("AMSC Comments") at 5-6; PanAmSat Comments at 5-6; Orion Comments at 12-16; Columbia Comments at 21-25; HBO Comments at 20-21.

^{66/} DISCO-II NPRM ¶ 68; COMSAT Comments at 12-20; Comments of Intelsat ("Intelsat Comments") at 7-8.

^{67/} COMSAT Comments at 30-33.

^{68/} DISCO-II NPRM ¶ 68.

maintains that competitive effects of IGO entry to the U.S. market should be judged only in terms of COMSAT's market power and not the IGO's market power.^{69/} In the case of Inmarsat, this argument ignores the fact that Inmarsat is a monopoly provider of global MSS, that it has access to very large global spectrum resources, that it is affiliated with ICO Global, and that it has very substantial influence with the national telecommunications regulators and monopoly service providers who are its owners. Accordingly, the market entry test applicable to Inmarsat^{70/} should not be a poorly-defined "effect on competition" test, but rather the same global ECO-Sat test that is applicable to other non-U.S.-licensed providers of global MSS services.^{71/}

Furthermore, COMSAT's suggestion that IGO service authorizations should transfer automatically to affiliates, subsidiaries, and successors of the IGOs contravenes the important principle that "if IGOs are to provide services in competitive markets, **they cannot be permitted to leverage the benefits of their**

^{69/} COMSAT Comments at 12-20. In a related argument, COMSAT argues that the Commission should find COMSAT's "home market" to be the United States in evaluating market entry by Intelsat and Inmarsat. Id. at 25-27. This argument diverts attention from the global market power of the IGOs by misapplying the Commission's proposed ECO-Sat test, which focuses on the markets to which the non-U.S.-licensed satellite system provides service, not on the "home market" of an individual wholesaler of that system's services.

^{70/} As discussed in the initial comments of Motorola and Iridium, the global ECO-Sat test should apply both to Inmarsat domestic services and to the non-maritime international services that are not mandated by the Maritime Satellite Act, and should apply to COMSAT's domestic Inmarsat service and earth station applications now pending before the Commission. See Motorola and Iridium Comments at 42-44.

^{71/} COMSAT (and ICO Global) agree that the same U.S. market entry test should apply to all non-U.S.-licensed MSS systems -- although they disagree with most other commenters as to the appropriate test. See COMSAT Comments at 12-20, 27-29 (supporting application of "effect on competition" test to all non-U.S.-licensed MSS systems); ICO Global comments at 45 (supporting "treat[ment] [of] IGO affiliates like any other non-U.S.-licensed satellite system").

intergovernmental status to unfairly distort competition."^{72/} Several circumstances in the global MSS market make it plain that the Commission must not accept COMSAT's suggestion:

- other than Inmarsat itself, the only non-U.S.-licensed GMPCS system under development is ICO Global, a commercial affiliate of Inmarsat.
- the Executive Branch has maintained that ICO Global and any privatized successor of Inmarsat should be an ordinary commercial entity^{73/}; and
- Inmarsat and ICO Global have expressed long term interest in merging ICO Global with a successor of Inmarsat.^{74/}

In view of these circumstances, failure to apply the global ECO-Sat test to affiliates, subsidiaries, and successors of Inmarsat will be likely to lead to a global MSS market in which competition is distorted by the continuing effects of the intergovernmental monopoly privileges of Inmarsat.

In one respect, however, Motorola and Iridium agree that the "effect on competition" test is relevant to U.S. market entry by the IGOs and their affiliates (with ownership and commercial ties to the IGO) and successors (that retain

^{72/} DISCO-II NPRM ¶ 71 (emphasis added); see also id. ¶ 73.

^{73/} See, e.g., Statement by the Representative of the Party of the United States of America, Inmarsat Doc. ASSEMBLY/11/23, Annex XIII (March 6, 1996) (Inmarsat successor).

^{74/} See Interim Report of the Intersessional Working Group (IWG) to the Inmarsat Assembly, Inmarsat Doc. ASSEMBLY/11/3, at 5 (Jan. 15, 1996) (indicating "the possibility of convergence between I-CO and Inmarsat in the long term"); see also Report of the Tenth (Extraordinary) Session of the Inmarsat Assembly, Inmarsat Doc. ASSEMBLY/10/18, at A31 (Dec. 13, 1994) (requesting a report "relating to the future structure of Inmarsat, taking into account the value of long term linkages with the Inmarsat-P Affiliate [I-CO Global], and the possibility of convergence between the two Organizations in the long term").

intergovernmental status or privileges or "global dominance"^{75/}). In its recent report, the GAO identified a number of advantages that flow to the IGOs from their ownership structures, privileges and immunities, and ready access to international capital markets.^{76/} The effects on competition in the United States of the government ownership, intergovernmental privileges and market power of the IGOs (and their affiliates and successors) should be an important, and separate, public interest factor in evaluating all space system, service and earth station applications to use the space segment of these entities for service in the United States.

IV. CERTAIN OTHER ISSUES RAISED BY THE COMMENTERS IN DISCO-II SHOULD BE ADDRESSED BY THE COMMISSION

This section addresses three miscellaneous issues raised by the commenters in DISCO-II: (1) the requirement of licensing of MSS handsets, (2) the application of U.S. technical requirements to non-U.S.-licensed satellite systems, and (3) foreign administration findings of scarcity of spectrum as a public interest factor.

A. COMSAT Is Incorrect That The Commission Does Not Propose To Require Licenses For Handsets Of Non-U.S.-Licensed MSS Systems

In a footnote to its comments, COMSAT makes the surprising assertion that "[t]he DISCO-II Notice is silent with respect to the regulatory treatment of mobile earth stations used for such services as MSS, presumably because the FCC recognizes that licensing such terminals would be wildly impractical."^{77/} This statement is just wrong. The DISCO-II NPRM explicitly states:

^{75/} DISCO-II NPRM ¶ 68.

^{76/} GAO Report at 4-5.

^{77/} COMSAT Comments at 34 n.57.

Under our proposal, any earth station user or operator in the United States that wishes to send or receive transmissions over a non-U.S. satellite must apply for and receive a Title III license to communicate with the non-U.S. satellite.^{78/}

There is no indication that this rulemaking proceeding will somehow exempt non-U.S.-licensed satellite systems from the requirements in the Commission's regulations for blanket licensing of mobile MSS earth stations.^{79/} In fact, the suggestion in COMSAT's footnote, if true, would mean that non-U.S.-licensed Big LEO MSS systems could easily avoid all U.S. licensing obligations, because the Commission does propose to exempt such systems from U.S. space station licensing^{80/} and because a GMPCS system can operate without a fixed gateway earth station in each country.^{81/} In order to avoid any future misunderstanding, the Commission should make clear that licensing of earth stations under DISCO-II covers licensing of mobile MSS earth stations (including handsets).

B. The Commission Should Apply U.S. Technical Standards To Non-U.S.-Licensed Satellite Systems, Except Where Appropriate Waivers Are Granted

While many DISCO-II commenters support the Commission's proposal to subject non-U.S.-licensed satellite systems to U.S. technical requirements,^{82/} other

^{78/} DISCO-II NPRM ¶ 15 (emphasis added).

^{79/} See, e.g., 47 C.F.R. § 25.115(d) (blanket licensing of 1.6/2.4 GHz (Big LEO) and non-voice, non-geostationary (Little LEO) MSS earth stations).

^{80/} DISCO-II NPRM ¶ 14.

^{81/} See ICO Annual Report at 6 (ICO Global system will have 12 "Satellite Access Nodes"); Motorola and Iridium Comments at 9 (IRIDIUM® System gateways will be located initially in 10-12 countries and ultimately in approximately 24 countries).

^{82/} See Motorola and Iridium Comments at 38; PanAmSat Comments at 4; AMSC Comments at 6-7; AT&T Comments at 13-14; MCI Comments at 24; HBO Comments at

(continued ...)

commenters oppose this proposal on the grounds that these standards may be excessively burdensome for non-U.S.-licensed systems.^{83/} The Commission should conclude that all technical standards in Part 25 of its regulations are applicable to non-U.S.-licensed satellite systems, except where the Commission waives the requirements as in the public interest.^{84/} The Commission should carefully consider appropriate waivers of technical requirements that are in fact inappropriately burdensome for non-U.S.-licensed satellite systems, to the extent the waivers do not result in harmful interference or reduction in competition. Otherwise, the Commission should apply U.S. technical requirements equally to all satellite systems providing service in the United States.

C. The Commission Should Take Into Account The Reasonableness Of Foreign Determinations Of Spectrum Scarcity As A Public Interest Factor In Applying The ECO-Sat Test

Teledesic Corporation ("Teledesic") states in its comments that "the number one *de facto* barrier about which the Commission must be vigilant [under the ECO-Sat test] is any unsupported claim of spectrum scarcity"^{85/} Motorola and Iridium strongly support this point. While licensing of U.S.-licensed satellite systems by foreign administrations is properly subject to spectrum coordination and availability, foreign administrations must not be permitted to exclude U.S.-licensed systems based upon illusory claims of scarcity of spectrum. Motorola and Iridium agree with Teledesic

^{82/} (... continued)

17-19; Comments of TMI Communications and Company, Limited Partnership at 17-18; Columbia Comments at 19 (supporting application of technical requirements regarding ground facilities).

^{83/} See COMSAT Comments at 36-38; Hughes Comments at 20-22; Loral Comments at 21-22; Columbia Comments at 19 (opposing application of technical requirements regarding satellites); WorldCom Comments at 8-9.

^{84/} See 47 C.F.R. § 25.112(b) (authorizing waiver of Part 25 license requirements).

^{85/} Teledesic Comments at 3.

that the Commission should take into account the reasonableness of foreign determinations of spectrum scarcity as a public interest factor in applying the ECO-Sat test.

V. CONCLUSION

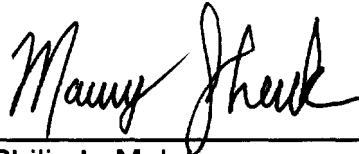
For the reasons stated above, the Commission: (1) should adopt the global ECO-Sat test for MSS that is proposed in the DISCO-II NPRM, including the critical mass standard component as refined in the comments of Motorola and Iridium and these reply comments; (2) should apply this test for all earth station applications by non-U.S.-licensed MSS systems, including Inmarsat and its affiliates and successors;

and (3) should resolve various other satellite licensing issues in the manner suggested in the comments of Motorola and Iridium and these reply comments.

Dated: August 16, 1996

Respectfully submitted,

**MOTOROLA SATELLITE
COMMUNICATIONS, INC.**



Philip L. Malet
Alfred M. Mamlet
Maury D. Shenk
Marc A. Paul
STEPTOE & JOHNSON LLP
1330 Connecticut Avenue, N.W.
Washington, DC 20036
(202) 429-3000

Michael D. Kennedy
Vice President and Director
Regulatory Relations
Barry Lambergman, Manager
Satellite Regulatory Affairs
MOTOROLA, INC.
Suite 400
1350 I Street, N.W.
Washington, DC 20005
(202) 371-6900

F. Thomas Tuttle, Vice President
and General Counsel
Patricia A. Mahoney, Senior Counsel
Regulatory Matters
IRIDIUM LLC
Eighth Floor
1401 H Street, N.W.
Washington, DC 20005
(202) 326-5600

CERTIFICATE OF SERVICE

I, Maury D. Shenk, hereby certify that the foregoing Reply Comments of Motorola Satellite Communications, Inc. and Iridium LLC were served, via first class mail, postage prepaid, this 16th day of August, 1996, on the following persons:

Chairman Reed E. Hundt
Federal Communications Commission
Room 814
1919 M Street, NW
Washington, DC 20554

Commissioner James H. Quello
Federal Communications Commission
Room 802
1919 M Street, NW
Washington, DC 20554

Commissioner Rachelle B. Chong
Federal Communications Commission
Room 844
1919 M Street, NW
Washington, DC 20554

Commissioner Susan B. Ness
Federal Communications Commission
Room 832
1919 M Street, NW
Washington, DC 20554

Donald H. Gips, Chief
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

James Ball, Associate Bureau Chief
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Tom Tycz
Chief, Satellite Division
International Bureau
Federal Communications Commission
Room 6010 - Mail Stop 1600I
2025 M Street, NW
Washington, DC 20554

Fern Jarmulnek
Chief, Policy Branch
Satellite Division
International Bureau
Federal Communications Commission
Room 658 - Mail Stop 1600I
2000 M. Street, NW
Washington, DC 20554

Cecily C. Holiday
Deputy Chief Satellite &
Radiocommunications Division
International Bureau
Federal Communications Commission
Room 6324
2025 M Street, NW
Washington, DC 20554

Julius Genachowski
Special Counsel
Office of the Chairman
Federal Communications Commission
Room 814-Stop Code 0101
1919 M Street, NW
Washington, DC 20554

John Stern
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Paula Ford
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Virginia Marshall
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Ruth Milkman
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Karen Kornbluh
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Joslyn Read
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Diane Cornell
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Peter Cowhey
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Brett Haan
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Kelly Cameron
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Olga Madruga-Forti
International Bureau
Federal Communications Commission
Room 800, Stop Code 0800
2000 M Street, NW
Washington, DC 20554

Don Abelson
Chief Negotiator for Telecommunications
& Information
Office of the United States Trade
Representative
600 17th Street, NW
Washington, DC 20506

Bill Corbett
Director, Services and
Telecommunications
Office of the United States Trade
Representative
600 17th Street, NW
Washington, DC 20506

Jack A. Gleason
Division Director
NTIA/OIA
Department of Commerce
Room 4701
14th & Constitution Avenue, NW
Washington, DC 20230

Phyllis Hartsock
Chief Counsel's Office
NTIA
Department of Commerce
Room 4713
14th & Constitution Avenue, NW
Washington, DC 20230

Nancy Eskenazi
Telecommunication Policy Specialist
NTIA/OIA
Department of Commerce
Room 4701
14th & Constitution Avenue, NW
Washington, DC 20230

Vonya B. McCann
Deputy Assistant Secretary for
International Communications and
Information Policy
Department of State
Room 6313
2201 C Street, NW
Washington, DC 20520

Michael T.N. Fitch
Deputy U.S. Coordinator and Director
Bureau of International Communications
and Information Policy
Department of State
Room 6313
2201 C Street, NW
Washington, DC 20520

Robin J. Frank
L/EBC
Department of State
Room 6320
2201 C Street, NW
Washington, DC 20520

Carl Willner
Antitrust Division
Department of Justice
Main Building-Room 8227
555 4th Street, NW
Washington, DC 20001

Edward Murphy
Department of the Treasury
Room 4462
15th & Pennsylvania Avenue, NW
Washington, DC 20220

Richard DalBello
Assistant Director for Aeronautics and
Space
Office of Science and Technology Policy
Room 423
Old Executive Office Building
17th & Pennsylvania Avenue, NW
Washington, DC 20500

Michael Deich
Special Assistant to the President for
Economic Policy
Office of Policy Development
Old Executive Office Building
17th & Pennsylvania Avenue, NW
Washington, DC 20500

J. Roger Wollenberg
William T. Lake
John H. Harwood, II
Gregorio B. Cater
Wilmer, Cutler & Pickering
2445 M Street, NW
Washington, DC 20037

John S. Hannon
Neal T. Kilminster
COMSAT Mobile Communications
22300 Comsat Drive
Clarksburg, MD 20871

Norman P. Leventhal
Raul R. Rodriguez
Stephen D. Baruch
Leventhal, Senter & Lerman
Suite 600
2000 K Street, NW
Washington, DC 20006-1809

Peter Hadinger
Space & Electronics Group
TRW, Inc.
Suite 800
1101 19th Street, North
Arlington, VA 22209

William D. Wallace
Crowell & Moring
1001 Pennsylvania Avenue, NW
Washington, DC 20004-2505

Lon C. Levin
Vice President and Regulatory Counsel
AMSC Subsidiary Corporation
10802 Parkridge Boulevard
Reston, VA 22091

Bruce D. Jacobs
Fisher, Wayland, Cooper, Leader
& Zaragoza, LLP
Suite 400
2001 Pennsylvania Avenue, NW
Washington, DC 20006

Cheryl A. Tritt
Susan H. Crandall
Stephen J. Kim
Morrison & Foerster, LLP
2000 Pennsylvania Avenue, NW
Suite 5500
Washington, DC 20006

Richard E. Wiley
Lawrence W. Secrest, III
William B. Baker
Rosemary C. Harold
John C. Quale
Stacy R. Robinson
Bruce A. Olcott
Wiley, Rein & Fielding
1776 K Street, NW
Washington, DC 20006

Gary M. Epstein
John P. Janka
Teresa D. Baer
Latham & Watkins
10001 Pennsylvania Ave., NW
Washington, DC 20004

Alan Y. Naftalin
Gregory C. Staple
Koteen & Naftalin, LLP
1150 Connecticut Avenue, NW
Washington, DC 20036

Scott Blake Harris
Mark A. Grannis
Gibson, Dunn & Crutcher LLP
1050 Connecticut Avenue, NW
Washington, DC 20036

Gerald Musarra
Senior Director, Commercial Programs
Space and Strategic Missiles Sector
Lockheed Martin Corporation
1725 Jefferson Davis Highway
Arlington, VA 22202

Albert Halprin
Stephen L. Goodman
Halprin, Temple, Goodman & Sugrue
Suite 650 East Tower
1100 New York Avenue, NW
Washington, DC 20005

Jack E. Robinson
President National Telecom Satellite
Communications, Inc.
2187 Atlantic Street
Stamford, CT 06902

Peter A. Rohrbach
Karis A. Hastings
Joel S. Winnik
K. Michele Walters
Hogan & Hartson LLP
555 Thirteenth Street, NW
Washington, DC 20004-1109

Yasuharu Iwashima
Executive Vice President
Japan Satellite Systems, Inc.
5th Floor Tranomon
17 Mori Building
1-26-5 Tranomon Minato-ku Tokyo
105 Japan

Henry Goldberg
Joseph A. Godles
Daniel S. Goldberg
Goldberg, Godles, Wiener &
Wright
1229 Nineteenth Street, NW
Washington, DC 20036

Mark C. Rosenblum
Peter H. Jacoby
Judy Sello
AT&T Corp.
Room 3244J1
295 North Maple Avenue
Basking Ridge, NJ 07920

Benjamin J. Giffin
Kathleen A. Kirby
Reed Smith Shaw & McClay
1301 K Street, NW
Suite 1100, East Tower
Washington, DC 20005

Kazunori Inagake
Director, KDD Washington Liaison Office
3400 International Drive, NW
Suite 3K-02 (INTELSAT BLDG.)
Washington, DC 20008-3098

Henry M. Rivera
Darren L. Nunn
Ginsburg Feldman and Bress, Chartered
1250 Connecticut Ave., NW
Washington, DC 20036

Thomas J. Keller
Eric T. Werner
Verner, Liipfert, Bernhard,
McPherson and Hand, Chartered
901 15th Street, NW
Suite 700
Washington, DC 20005-2301

Robert S. Koppel
Tally Frenkel
WorldCom, Inc.
15245 Shady Grove Road
Suite 460
Rockville, MD 20850

Carol R. Schultz
Larry A. Blosser
MCI Telecommunications
Corporation
1801 Pennsylvania Ave., NW
Washington, DC 20006

James T. Roche
Regulatory Counsel
Keystone Communications
Corporation
Suite 880
400 N. Capitol Street, NW
Washington, DC 20001

Michael J. Lehmkuhl
Pepper & Corazzini, LLP
1776 K Street, NW
Suite 200
Washington, DC 20006

Randolph J. May
Timothy J. Cooney
Sutherland, Asbill & Brennan
1275 Pennsylvania Avenue, NW
Washington, DC 20004-2404

Terri B. Natoli
Fleischman and Walsh, LLP
1400 Sixteenth Street, NW
Suite 600
Washington, DC 20036

Christine G. Crafton, Ph.D.
Director, Industry Affairs
General Instrument Corporation
1133 21st St., NW
Suite 405
Washington, DC 20036

Robert E. Conn
Shaw, Pittman, Potts &
Trowbridge
2300 N Street, NW
Washington, DC 20037



Maury D. Shenk
Steptoe & Johnson LLP
1330 Connecticut Avenue, NW
Washington, DC 20036-1795